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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,100	01/28/2004	William C. Albertson	GP-302869	2181
7590	07/13/2006			EXAMINER LEWIS, TISHA D
CHRISTOPHER DEVRIES General Motors Corporation Legal Staff, Mail Code 482-C23-B21 P.O. Box 300 Detroit, MI 48265-3000			ART UNIT 3681	PAPER NUMBER

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/766,100	ALBERTSON, WILLIAM C.
	Examiner TISHA D. LEWIS	Art Unit 3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-26 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 1-8 is/are allowed.  
 6) Claim(s) 9,10,17,20 and 24-26 is/are rejected.  
 7) Claim(s) 11-16, 18, 19 and 21-23 is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	6) <input type="checkbox"/> Other: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. 6) <input type="checkbox"/> Other: _____	

## **DETAILED ACTION**

The following is a response to the amendment received on April 16, 2006 which has been entered.

### ***Response to Amendment***

Claims 1-26 are pending in the application.

-The 102(e) rejection of claims 17 and 24-26 has been withdrawn due to applicant amending claim 17 with limitations not disclosed by the prior art of record.

-The 102(e) rejection of claim 17 and 26 has been withdrawn due to applicant amending claim 17 with limitations not disclosed by the prior art of record.

-The 103(a) rejection of claims 24 and 25 has been withdrawn due to the withdrawal of the rejection to claim 17.

### ***Response to Arguments***

Applicant's arguments with respect to the Phillips reference smoothing disturbances while the engine is already operating have been fully considered and are persuasive. The 103(a) rejection of claims 1 and 4-6 has been withdrawn.

Applicant's arguments have been fully considered but they are not persuasive. As to applicant's arguments concerning the remaining claims under the 103(a) rejection, although the engine of Phillips is not a variable engine, it is used as a secondary reference to show that it is well known in the art to smooth torque of an engine using a motor during engine activation and since this is done before the engine is shut off again, it can be considered the transition between activation and deactivation.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, it is unclear as to if the limitation "the reactivation transition" is the same as "an activated mode", please clarify or amend claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 10, 17, 20, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhavsar et al ('807) in view of Phillips et al ('705).

Bhavsar et al discloses a variable displacement engine (16) wherein the cylinders can be operated in the activated mode where all cylinders are active or in a deactivated mode where less than all cylinders are active (via 28) wherein a motor (14) controls engine torque to prevent frequent shifting between the modes and provide torque when the engine is less than a desired torque (at starting of engine). But Bhavsar et al does not disclose using the motor to smooth disturbances during the transition in modes.

Phillips et al discloses a inverter (16) connected to a battery (26) and using a motor (22) to control torque disturbances from an engine (20) when all cylinders are to be activated (start of engine).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Bhavsar et al with an engine torque control between transitions in view of Phillips et al since Bhavsar et al already uses the motor torque to control the engine torque to prevent frequent shifting of the transitions and maintaining a smooth vehicle response to driver demand.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bhavsar et al in view of Phillips et al as applied to claim 17 above, and further in view of Kataoka et al. Bhavsar et al in view of Phillips et al discloses a battery, but does not disclose what type of battery it is.

Kataoka et al discloses that a lead battery can be used as a power supply source.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the battery of Bhavsar et al in view of Phillips et al as a lead battery in view of Kataoka et al to provide high input to output characteristics at time of actuation of a motor.

***Allowable Subject Matter***

Claims 1-8 are allowed.

Claims 11-16, 18, 19 and 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 571-272-7093. The examiner can normally be reached on M-Thur 6 AM TO 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Tdl  
July 9, 2006

*R. Lewis*  
TRINA LEWIS  
PRIMARY EXAMINER  
AU 3681 7/9/06